

CLAIMS

What is Claimed is:

1           1.       In a wireless communication network comprising a plurality of terrestrial  
2 receivers and terrestrial transmitters, each serving a service region, a method of providing  
3 at least a portion of digital data to a user, comprising the steps of:

4           (a)     receiving the portion of the digital data in a satellite receiver;

5           (b)     providing the received portion of the digital data to at least one of the  
6 terrestrial transmitters; and

7           (c)     transmitting the received portion of the digital data to the user within the  
8 service region.

1           2.       The method of claim 1, wherein the satellite receiver is communicatively  
2 coupled to the terrestrial transmitter.

1           3.       The method of claim 1, wherein the wireless communication network is a  
2 cellular telephone network.

1           4.       The method of claim 1, further comprising the steps of:  
2 determining if a transmission requirement of the digital data exceeds a capacity of  
3 the wireless communication network; and  
4 performing steps comprising steps (a) through (c) only if the transmission  
5 requirements of the digital data exceed the capacity of the wireless communication  
6 network.

1           5.       The method of claim 4, wherein the step of determining if a transmission  
2 requirement of the portion of the digital data exceeds a capacity of the wireless  
3 communication network comprises the steps of:  
4           determining the transmission requirement for the portion digital data;  
5           determining the transmission capacity of the wireless communication network;  
6 and  
7           comparing the transmission requirements for the digital data with the transmission  
8 capacity of the wireless communication network.

1           6.       The method of claim 4, further comprising the steps of:  
2           providing the portion of the digital data to a satellite uplink, uplinking the portion  
3 of the digital data from the satellite uplink to a satellite, and transmitting the digital data  
4 only if the transmission requirements of the portion of the digital data exceed the capacity  
5 of the wireless communication network.

1           7.       The method of claim 4, wherein the transmission requirement comprises a  
2 minimum bandwidth.

1           8.       The method of claim 4, wherein the transmission requirement comprises a  
2 size of the media program.

1           9.       The method of claim 4, wherein the transmission requirement comprises a  
2 quality of service (QoS) parameter.

1           10.      The method of claim 4, wherein the transmission requirement comprises a  
2 cost of service parameter.

1           11.     The method of claim 4, further comprising the steps of:  
2           receiving information describing in which service region the user is located; and  
3           transmitting the digital data only to a satellite receiver associated with the service  
4     region in which the user is located.

1           12.     In a wireless communication network comprising a plurality of terrestrial  
2     receivers and terrestrial transmitters, each serving a service region, an apparatus for  
3     providing at least a portion of digital data to a user, comprising:  
4           means for receiving the portion of the digital data in a satellite receiver; and  
5           means for providing the received portion of the digital data to at least one of the  
6     terrestrial transmitters for transmission to the user.

1           13.     The apparatus of claim 12, further comprising means for transmitting the  
2     portion received digital data to the user within the service region using the terrestrial  
3     transmitter.

1           14.     The apparatus of claim 12, wherein the wireless communication network is  
2     a cellular telephone network.

1           15.     The apparatus of claim 12, further comprising:  
2           means for determining if a transmission requirement of the digital data exceed a  
3     capacity of the wireless communication network; and  
4           means for providing the portion of the digital data to at least one of the terrestrial  
5     transmitters only if the transmission requirements of the digital data exceed the capacity  
6     of the wireless communication network.

1           16.     The apparatus of claim 15, wherein the means for determining if a  
2 transmission requirement of the digital data exceeds a capacity of the wireless  
3 communication network comprises:

4               means for determining the transmission requirement for the digital data;

5               means for determining the transmission capacity of the wireless communication  
6 network; and

7               means for comparing the transmission requirements for the digital data with the  
8 transmission capacity of the wireless communication network.

1           17.     The apparatus of claim 15, further comprising:

2               means for providing the digital data to a satellite uplink, uplinking the digital data  
3 from the satellite uplink to a satellite, and transmitting the digital data only if the  
4 transmission requirements of the digital data exceed the capacity of the wireless  
5 communication network.

1           18.     The apparatus of claim 15, wherein the transmission requirement  
2 comprises a minimum bandwidth.

1           19.     The apparatus of claim 15, wherein the transmission requirement  
2 comprises a size of the media program.

1           20.     The apparatus of claim 15, wherein the transmission requirement  
2 comprises a quality of service (QoS) parameter.

1           21.     The apparatus of claim 15, wherein the transmission requirement  
2 comprises a cost of service parameter.

1           22.     The apparatus of claim 15, further comprising:  
2                 means for receiving information describing in which service region the user is  
3     located; and  
4                 means for transmitting the digital data only to a satellite receiver associated with  
5     the service region in which the user is located.

1           23.     In a wireless communication network comprising a plurality of terrestrial  
2     receivers and terrestrial transmitters, each serving a service region, an apparatus for  
3     providing at least a portion of a digital data to a user, comprising:  
4                 a satellite antenna, for receiving a signal from a satellite, the signal including the  
5     portion of the digital data; and  
6                 a satellite receiver communicatively coupled to the satellite antenna for detecting  
7     and demodulating the signal to produce the portion of the digital data, the satellite  
8     receiver communicatively coupled to the terrestrial transmitter.

1           24.     The apparatus of claim 23, wherein the communication network is a  
2     cellular telephone network.

1           25.     The apparatus of claim 23, wherein the satellite antenna is disposed within  
2     the service region.

1           26.     The apparatus of claim 23, wherein the satellite antenna is disposed  
2     proximate the terrestrial transmitter.